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EXAMINER				
FABER, DAVID				
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2178				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/817,046

**Applicant(s)**

ELZA ET AL.

**Examiner**

DAVID FABER

**Art Unit**

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3, 6-9, 12-16, 18, 21-24 and 27-37 is/are pending in the application.
- 4a) Of the above claim(s) 12-15 and 27-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 6-9, 16, 18, 21-24, and 31-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 9/14/09
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is in response to the Request for Continued Examination filed on 4 September 2009 and the Information Disclosure Statement filed on 14 September 2009.

#### **This office action is made Non Final.**

2. Claims 1, 8, 9, 16, 18, 23, 24, and 31 have been amended.

3. Claims 4, 5, 19, 20, and 32 have been cancelled.

4. Claims 36 and 37 have been added.

5. Claims 1, 3, 6-9, 12-16, 18, 21-24, and 27-37 pending, with claims 1, 16, and 31 being the independent claims. Claims 12-15, 27-30 have been withdrawn from consideration (see below). Claims 1, 3, 6-9, 16, 18, 21-24, and 31-37 have been examined below.

#### ***Information Disclosure Statement***

6. The information disclosure statement filed 14 September 2009 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the references listed fail to list its pertinent pages or incorrectly list its pertinent pages. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all

certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 3-9, 16, 18-24, and 32-35 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Iverson, Lee, "NODAL: A File system for Ubiquitous Collaboration," White Paper, SRI International, September 20, 2001, last downloaded by the Examiner on January 13, 2006 from <http://nodal.sourceforge.net/NODAL-WhitePaper.html>, downloaded pages 1-32 [hereinafter "NODAL"], in view of Iverson, Lee, "[un re-II] Meeting Summary: 4 May 2000," Message id: 3912508E.2CF1B4C@eng.sun.com from Erick Armstrong, May 4, 2000, last downloaded by the Examiner on January 14, 2006, from: <http://hot.burningchrome.com/archives/unrev-ii/msg01068.html>, downloaded pages 1-3 [hereinafter "Iverson"].

Regarding independent claim 1, NODAL in view of Iverson teaches:

*A method in a distributed document object model system for associating business logic, comprising:*

(It is noted that a "business logic" is defined in the application as including an asynchronous

mode wherein a client-side business logic component may not need to wait for the DDOM client to receive a response to a mutation request before the mutation routine returns. Specifically, see Iverson (NODAL), page 27, third paragraph, stating: "Another advantage is that the server may send *any* update to the client at any time, thus fulfilling the need to notify the client when other users have modified content." (Emphasis in the original). The Iverson example, of notification to clients of a change in a database, is nearly identical to the embodiment described in the disclosure, as follows: "As an example, the business logic component may monitor a financial database and cause mutations to occur to a document based on changes in the database."

The distributed document object model DDOM, is taught in Iverson, first through third paragraphs.)

*receiving a first registration request from a first business logic event handler for a first event of the distributed document object model;*

(See, NODAL, pages 26-27, teaching the asynchronous update routine. See also, NODAL, pages 20-21, teaching the "Cursor" interface that handles the data mutation interfaces as the business event logic handler.)

*registering the first business logic event handler for the first event of the distributed document object model system; the first business logic event handler is registered for a hierarchical document of the distributed document object model system,*

(See, NODAL, pages 20-21, teaching that the "Cursor" is part of the software and is inherently registered to be in communication between the client and the server. Furthermore, as disclosed above, Iverson teaches a DDOM, a tree-structure form of a document. Thus, a hierarchical document is presented)

*monitoring for an occurrence of at least one of the first and second events;*

*detecting an occurrence of the first event; and in response to the occurrence of a first event, notifying the first business logic event handler; the first business logic event handler is responsive to an occurrence of the first event of the distributed document object model system*

(See, NODAL, page 20, teaching the permissions for mutations are notified to the "Cursor" object.)

*receiving a first indication from the first business logic event handler; and*

(See, NODAL, pages 18-20, teaching messages from the "Cursor" object regarding requested mutations.)

*performing a first function relating to the received first indication.*

(See, NODAL, pages 18-20, teaching the editing functions.)

(NODAL teaches the business logic handler and its registration and function as claimed, but it does not expressly teach the distributed document object model (DDOM).

Iverson expressly teaches the DDOM.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Iverson and NODAL. Both NODAL and Iverson are in the same field of endeavor, multi-user hierarchical document editing and manipulation.

The suggestion or motivation to combine the references is that they are created by the same person, Iverson reporting the developmental creation of Lee Iverson, and NODAL being authored by Lee Iverson. In addition, see, NODAL, page 11, teaching that NODAL was designed to work with a wide variety of distributed networks.)

NODAL teaches application of a business rule to cause modifications (i.e. second and/or third modifications, etc.) to a document, and the system causing the event to occur when a first modification is made (See, NODAL, at least page 20, teaching that the "Cursor" object enforces

business rules related to permissions to make mutations.). See also NODAL, page 20, teaching that a program accessing the NODAL repository for any purpose other than browsing will deal primarily with the "Cursor" interfaces. See also, NODAL, page 27, teaching messaging from the server, "Cursor" object, regarding mutations.

Furthermore, it is implicitly known if the NODAL et al's method is capable of performing the functionality once, then it may generate the same functionality over again. Thus, NODAL discloses functionality of a second business logic event handler for a second event, wherein there both are separate and different since a second handler is for a second event while a first handler is for a first event.

Regarding **dependent claim 3**, Claim 3 recites similar limitations as in Claim 1 and is similarly rejected under similar rationale. Furthermore, NODAL in view of Iverson teaches:

*The method of claim 1 wherein the first business logic event handler is registered for a first document type and the second business logic event handler is registered for a second document type.*

(See, NODAL, page 29, teaching the system, and inherently the "Cursor" object, enabled for an "image" type document.)

Regarding **dependent claim 6**, NODAL in view of Iverson teaches:

*The method of claim 2 wherein event handling is performed on a client computing device.*

(See, NODAL, pages 9-10, teaching that the NODAL system may be either client-side or server-side.)

Regarding **dependent claim 7**, NODAL in view of Iverson teaches:

*The method of claim 2 wherein event handling is performed on a server computing device.*

(See, NODAL, pages 9-10, teaching that the NODAL system may be either client-side or server-side.)

Regarding **dependent claim 8**, NODAL in view of Iverson teaches:

*The method of claim 1 wherein the first event handler handles a first event that is occurs before the first modification is made to the first hierarchical document.*

(See, NODAL, page 20, teaching that the "Cursor" object processes the entire content of the reference, including the mutation.)

Regarding **dependent claim 9**, NODAL in view of Iverson teaches:

*The method of claim 1 wherein the first event handler handles a first event that is occurs after the first modification is made to the first hierarchical document.*

(See, NODAL, page 20, teaching that the "Cursor" object maintains an audit trail after mutations are made.)

Regarding **claims 16, 18, 21-24**, claims 16, 18, 21-24 incorporate substantially similar subject matter as claimed in claims 1, 3-9, respectively, and are rejected along the same rationale.

Regarding **independent claim 31**, Claim 31 incorporates substantially similar subject matter as in claim 1, and is rejected along the same rationale. Furthermore, NODAL and Iverson fail to



disclose the functionality of a first event occurring again in view of a second event caused by the first action. However, it was well-known in the art at the time of Applicant's invention that the user can perform the same modification again of the first mutation causing the functionality of a first event to occur again for the second event. The suggestion or motivation to combine the references is it enables a user to fix a mistake the second time by correcting the mistake after making the mistake originally during the first time.

Regarding **claims 32-37**, claims 32-37 incorporate substantially similar subject matter as claims in claims 1, 16, and 31 are rejected along the same rationale. Furthermore, NODAL discloses the editing of nodes. (Pages 18-20)

### ***Response to Arguments***

9. Applicant's arguments filed 4 September 2009 have been fully considered but they are not persuasive.

10. On pages 13-14, in regards to the independent claim 1 and its parallel claims, Applicant argues that NODAL nor Iverson fail to teach or suggest the amended claimed limitations. Applicant argues that a Cursor is not a business logic event handler or, NODAL doesn't disclose a more than one business logic event handlers, NODAL doesn't suggest event handler are responsive to occurrences of events, NODAL doesn't describe registering event handlers or doesn't teach monitoring for events and detecting the occurrence of events. However, the Examiner disagrees.

a. The claim language itself fails to disclose what a business logic handler is or how a handler is registered. In addition, the arguments presented by the Applicant fail

to disclose what a business logic event handler is or how the handler is registered involve any supporting evidence from the specification stating or describing the limitation, or how the cited art is specifically different from Applicant's invention .

Therefore, from the specification defining a "business logic", it is noted that a "business logic" is defined in the application as including an asynchronous mode wherein a client-side business logic component may not need to wait for the DDOM client to receive a response to a mutation request before the mutation routine returns.(i.e. Paragraph 0126). Thus, specifically, see Iverson, page 27, third paragraph, stating: "Another advantage is that the server may send *any* update to the client at any time, thus fulfilling the need to notify the client when other users have modified content." (Emphasis in the original). The Iverson example, of notification to clients of a change in a database, is nearly identical to the embodiment described in the disclosure, as follows: "As an example, the business logic component may monitor a financial database and cause mutations to occur to a document based on changes in the database.". NODAL, pages 26-27, teaches the asynchronous update routine. NODAL, pages 20-21, teaches the "Cursor" interface that handles the data mutation interfaces as the business event logic handler. NODAL, page 27, teaches a business logic event handler such that mutations to the file may be automatically messages to a client, or may be delayed for processing. NODAL, pages 20-21, teaches that the "Cursor" is part of the software and is inherently registered to be in communication between the client and the server. NODAL teaches the business logic handler and its registration and function as claimed

Furthermore, it is implicitly known if the NODAL et al's method is capable of performing the functionality once, then it may generate the same functionality over again. Thus, NODAL discloses functionality of a second business logic event handler for a second event, wherein there both are separate and different since a second handler is

for a second event while a first handler is for a first event.

b. Furthermore, the claim language itself fails to disclose occurrences of events are monitored. The arguments presented by the Applicant fail to disclose what these occurrences of events, and/or how occurrences of events are monitored by involving any supporting evidence from the specification stating or describing the limitation, or how the cited art is specifically different from Applicant's invention. Thus, it is the examiner's opinion that NODAL on page 20 teaches the permissions for mutations are notified to the "Cursor" object, and on pages 18-20 teaches messages from the "Cursor" object regarding requested mutations.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Faber whose telephone number is 571-272-2751. The examiner can normally be reached Monday-Thursday, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong, can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/David Faber/  
Examiner, Art Unit 2178\

/William L. Bashore/  
Supervisory Patent Examiner, Art Unit 2175